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(21) International Application Number: PCT/US99/25109 (22) International Filing Date: 26 October 1999 (26.10.99) (30) Priority Data: 60/105,657 26 October 1998 (26.10.98) US (71) Applicant (for all designated States except US): VENTANA MEDICAL SYSTEMS, INC. [US/US]; 3865 N. Business Center Drive, Tucson, AZ 85705 (US). (72) Inventors; and (75) Inventors/Applicants (for US only): LIGHT, Elizabeth, S. [US/US]; 23612 Rolling Fork Way, Gaithersburg, MD 20882 (US). NUOVO, Gerard [US/US]; 600 Bridgewater Court, Westerville, OH 43081 (US). (74) Agent: TARCZA, John, E.; Ventana Medical Systems, Inc., 209 Perry Parkway, Gaithersburg, MD 20877 (US).		(81) Designated States: AL, AU, BA, BB, BG, BR, CA, CN, CU, CZ, EE, GD, GE, GH, HR, HU, ID, IL, IN, IS, JP, KP, KR, LC, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, SL, TR, TT, UA, US, UZ, VN, YU, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG). Published With international search report.
(54) Title: DETECTION OF HUMAN PAPILLOMA VIRUS IN PAPANICOLAOU (Pap) SMEARS (57) Abstract Methods and reagents for detecting higher risk human papilloma virus DNA types in cells on a Pap smear which indicates the patient is at higher risk for cancer are described. The method uses full length DNA probes to HPV types (16, 18, 31, 33, 35, and 51) in a particular proportion to hybridize to and detect the viral DNA in-situ. The method differentiates high risk from low risk human papilloma virus DNA in cells which indicates the patient's risk for cancer. The in-situ hybridization is detected by brightfield microscopy.		